NAGPUR CITY AND METROPOLITAN REGION

Promoting concept of Regional Circular and Ecological Sphere
For sustainable resource management

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**AIM** “Promoting the concept of **Regional Circular and Ecological Sphere (RCES)** for sustainable resource management and collective resilience of urban-rural areas in Nagpur Metropolitan Region”

**OBJECTIVE** To understand **inter-dependencies between urban and surrounding rural areas** and arrive at sustainability guidelines for the Nagpur Metropolitan Region.

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**INTERDEPENDENCY OF URBAN AND RURAL REGIONS**

Unmanaged Linkages can lead to Disasters
Nagpur is one of the top 10 most affected hotspot districts in India belong to the Vidarbha region of Maharashtra State.

Impact of urbanization on surrounding rural areas

(Source- World Bank Report, 2018)
**Upstream forest areas to Downstream rural and urban areas**

<table>
<thead>
<tr>
<th>Settlement Type</th>
<th>No. of settlements</th>
<th>Population of the region</th>
<th>Sample size covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest area</td>
<td>Six</td>
<td>3,857</td>
<td>85</td>
</tr>
<tr>
<td>Rural area</td>
<td>Five</td>
<td>17,373</td>
<td>100</td>
</tr>
<tr>
<td>Peri-urban area</td>
<td>Eight</td>
<td>36,936</td>
<td>145</td>
</tr>
<tr>
<td>Urban area</td>
<td>Eleven</td>
<td>1,75,795</td>
<td>200</td>
</tr>
</tbody>
</table>
ISSUES IN SELECTED SETTLEMENTS

<table>
<thead>
<tr>
<th>Settlement</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jamuniya and Ghoti</td>
<td>Under developed water distribution system in the settlements. No awareness about government schemes.</td>
</tr>
<tr>
<td>Salai and Pipriya</td>
<td>Acute water storage has led to decreased livestock productions and thereby selling the cattle.</td>
</tr>
<tr>
<td>Kirangi Sarra</td>
<td>Located at 50m from the river line and yet faces water deficiency. Solar power-driven motor used to pump the water.</td>
</tr>
</tbody>
</table>

Polluted wells  Dry farm lands  Water wastage

Water supply frequency is abrupt and insufficient.
# Issues in Selected Settlements

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<th>Settlement</th>
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<tbody>
<tr>
<td>Bhilgaon</td>
<td>Dependent on community water supply systems like community taps</td>
</tr>
<tr>
<td>Khairy</td>
<td>R.O. systems for drinking purpose, maintained by GP</td>
</tr>
<tr>
<td>Warada and Gondegaon</td>
<td>Completely dependent on bore wells and tube wells in which the water level has decreased in recent years. WCL mining activities adversely affecting the environment and water quality.</td>
</tr>
<tr>
<td>Dahegaon and</td>
<td><strong>Presence of Sulphur and high mineral content</strong> has degraded the quality of water.</td>
</tr>
</tbody>
</table>

Community taps   RO Filters   WCL Mines   Dry canals
Almost 95% respondents want Sustainable Rural-Urban Development which will ensure the sustainability of resources.

(Source: Primary Survey)
DECI SI ON THEAT ER WORKSHOP

Stakeholder Consultation

Govt. Officials

NGOs

Experts

Media

Public representatives

Community based organizations

Education Institution s

(Source- Author)
KEY OBSERVATIONS
FROM STAKEHOLDER WORKSHOP

• Apart from planning process, stakeholder participation shall extend up to review and monitoring stage, aiming at livelihood security and increased agriculture productivity.
• Actions for environmental conservation including plantation and water conservation measures are necessary to be initiated at both urban and rural areas with better co-ordination between authorities and participating NGOs, CSOs and local communities.
• Measures such as water audit and other innovative mechanisms need to be encouraged at appropriate levels.
• Multiple agencies working on agriculture; livelihood programs water and forestry etc. need to be converged into single forum in order to ensure effective implementation of resource conservation efforts.
• Institutions involved need to sensitized and build capacity for better addressing the local environmental concerns and improved participation of local communities.
• Documentation of best practices and more formalization of innovative practices at local levels.
• Urban and rural areas are both linked in complex ways, and in case of natural calamities or any disaster both will be disturbed due to shared natural resources.

• **Regional circular and ecological sphere** can only be achieved by **strengthening the linkages** between Urban-rural areas to form resilient communities.

• A **sustainable engagement between stakeholders** is necessary for conservation of natural resources as well as to achieve resilient development of communities.
THANK YOU